THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

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AROUND THE LAKES.

CLEVELAND.

The tug International received repairs on Messrs. Smith's drydock last week.

Captain D. M. Becker, who has been out of the city, is now ready to continue business.

A warrant has been issued for the arrest of the man who reported the schooner Elgin ashore. He will probably be found in Detroit.

Mr. Smith has laid before the city council an ordinance repealing that which requires the closing of the draw bridges for an hour in the morning and evening.

The schooner Colonel Cook is having a leak stopped and some calking. The tug N. B. Gates, which suffered by collision with the James Amadeus on Sunday, is having her stern repaired in Smith's slip.

Freight rates continue unchanged, ruling at 75@80 cents from Escanaba, and $1.05@$1.10 from Marquette, and coal is firm at 55@60 cents from Buffalo to Milwaukee and Chicago. The schooners Thomas P. Shelden and Camden are completing an ore contract at 95 cents.

The city council, in order to lead people to think they are taking fire preventive measures, adopted an ordinance that lumber dealers must build high fences around their yards. This will probably fix it, as it is believed fire bugs can not climb and sparks can not fly over fences.

Since the 17th of June forty-three vessels have been loaded with iron ore at Wellers' Bay for Cleveland. Shipments will continue at the rate of about one vessel per working day until the close of navigation. Vessel owners or captains wishing to charter may communicate with the shipper, Mr. D. S. McMullen, secretary of the Coe Hill Mining Company, Trenton, Ont.

Telegrams announce that there was a large fleet at Duluth, many vessels being detained there for several days waiting for their cargoes. Vessel owners are not satisfied with this condition and think parties at that port should not make engagements at the present low rates faster than they can give prompt dispatch. It is understood that the steamer Columbia and consort Comrade are chartered to load wheat at Duluth.

A libel was filed in the United States District Court on Saturday last by Philip Minch, T. W. Nichols, William J. Trinter, Peter G. Minch and William Young, owners of the steambarge John N. Glidden, against the tug Mystic, of the Sandusky harbor, in which they claim as due them from the tug the sum of $518.25 for expenses incurred and damage resulting from delay because of their steambarge getting aground in the channel of Sandusky harbor while in tow of the Mystic, on the morning of the 20th of last month.

The Canadian schooner Queen of the Lakes, which was ashore at Avon Point was released and placed in Globe drydock where she had her bottom calked. She also got a new shoe, a piece of keel, and foremast. Her damage will probably reach $1,200. The steambarge J. E. Mills had her stern bearing repaired and her bows ironed for work in the ice this winter. The schooner S. L. Watson had her buts calked and some leaks stopped. The propeller Nashua had a broken wheel fixed. The steambarge V. Swain got a new wheel and some calking, and the schooner W. S. Crosthwaite will receive some minor repairs.

Captain Slyfield, of the steambarge Cleveland, reports that he picked up a man in a small skiff who had been struggling thirteen hours with the weather, off Port Austin. He left Pigeon River for Port Austin, and the wind took him out to sea. When picked up by Captain Slyfield he was standing in the boat, which was full of water, and about exhausted, having been thrown from the boat several times. He was at one time within one half mile of Port Austin light and hailed there several times but failed to get assistance. He was landed at Detroit. The name of the unfortunate man was not ascertained.

During the third quarter, ended September 30, local inspectors at this port, Messrs. Stanard and Fitzpatrick, have inspected forty-one craft, as follows:

Class.	No	Gross Ton.	Net Ton.
Passenger	5	380.90	224.83
Towing	17	419.28	228.93
Yacht	2	9.45	4.97
Canal	1	60 00	30.00
Freight	16	13039.26	10393.51
Total	41	13908.89	10,877.24

ASHTABULA.

Special to the Marine Record.

The tug Dexter, while outside Wednesday after a vessel, became disabled by loosening her rudder and drifted some distance in the lake, when the tug Red Cloud went to her assistance and towed her into port.

The schooners Columbia and Seigel, which laid here some time in ordinary, have both got away. The Seigel loaded coal for Detroit at 30 cents per ton, and the Columbia towed to Cleveland with the tug R. K. Hawley to load coal for Racine at 65 cents.

McKenzie & Barrett have got the contract for the inside extension of the west pier, amounting to $22,000.

J. P. Devney has been awarded the contract of completing the lighthouse elevated walk on the west pier.

The dredge Erie arrived here Tuesday to commence work on the Lake Shore slip, which will be 1,150 feet in length, L. Linn, of Erie, Pa., having the contract.

The steambarge Havana and consort Helena, and steambarge Oscar Townsend and consort Ed. Kelley have been laid up here about a week, waiting for orders. The two latter have been chartered and will get away soon.

Repairs at Devney's shipyard since my last report are: The schooner M. F. Merrick, topsides overhauled, buts calked, some new ceiling in the hold; F. A. Danford, bad leak stopped in her centreboard box and new main crosstrees; Ed. Kelley, timber heads forward and some other repairs; E. C. Maxwell, some repairs; San Diego, monkey rail forward and some repairs; G. W. Adams, checks on main mast head and some other repairs; steambarge Oscar Townsend, some repairs; City of Cleveland, some turned stanchions; Raleigh, stern repaired. J.P.

OSWEGO.

It will be remembered, says the Times, that some weeks ago the tug Caribou lost one of her barges, the Jean Bart, about five miles down the lake. Paul Metotte, who lives on the lake shore reports the barge ashore and partly out of the water in what is known as "Nigger bay."

The keel has been laid for a new tug on Mitchell & Gallagher's dock. The tug is intended to take the place of the Jason Parker. The machinery of the old tug will be used in the new one.

CHICAGO.

Special to the Marine Record.

The schooner Lillie Pratt lost her jibboom by collision on the lumber Market on Saturday.

J. H. Rogers, inspector of lighthouses, has returned from an extended official tour of the West coast. He reports the service as in unusually good condition, and everything in readiness for the stormy period approaching. "We do not wish trouble to occur for the purpose of demonstrating our capability," said Mr. Rogers, "but if it does come, it will find the service in better shape than ever before in its history." As an evidence of the lookout kept, he cited the case at Two Rivers, where a small flag signal of distress was seen and answered by the man on watch, although it was ten miles distant.

Thomas Bageley, yacht and boat builder, is building a steam yacht for C. P. Willard, Esq., of Chicago, of the following dimensions: Length over all, 31 feet; breadth of beam, 7 feet; depth of hold, 3 feet.

The steambarge R. C. Brittain brought to Miller Brothers' shipyard six of Pierson's new patent propeller wheels of various sizes, which have been manufactured by Wilson & Hendrie, of Montague, Mich.

The disabled schooners Thomas Howland and Cecelia have been brought to this port. The schooners have been stripped and laid up for this season, times being too bad to allow necessary repairs being done upon them.

The schooner Queen City of Cleveland, Captain Case, coal laden, arrived at this port Saturday morning. The tug Sampson, which had the Queen City and Johnson in tow was forced to let go of them off Ahnapee. The Sampson arrived at Milwakee minus her rudder on Thursday, and went into drydock.

Freights continue at 1¾ cents for wheat and 1½ cents for corn to Buffalo, but charters are scarce even at these miserably low rates, and many fine schooners are laying in ordinary as they cannot find anything to do that would pay for doing. This is a sad state of affairs to commence the month of October upon.

At the Chicago Drydock Company's yard the steambarge J. R. Whiting went into drydock to have her stern bearing fixed and some calking; the steambarge Swallow for a new Sheriff wheel; the tug Brothers to get a leak stopped; the steamer A. B. Taylor for a new wheel; the schooner Fearless to get a leak stopped; the schooner Ellen Ellenwood to get a leak stopped; the schooner Lavinda was supplied with a new jibboom.

Captain W. J. Fagan, formerly of the Wm. Edwards, has been paying a visit to this port. He is about to take a trip to New Orleans with some friends on his steam-yacht, but is delayed somewhat through having to appear at Sandusky to answer a charge made against him by Mr. Fries, of Milan, for threatening his life. Captain Fagan, emphatically denies that he ever made use of any such threats, and says that the words he is accused of using were never spoken by him.

The schooners Cecelia and Westchester arrived yesterday. The captain of the former filed a wreck report in which he stated that the Cecelia had been ashore on a reef near Jacksonport, and sustained $700 damage. Of this amount $300 was incurred by the crew jettisoning her deckload. The Westchester was towed here by the tug Swift, of Sturgeon Bay.

Captain T. W. Steel, former harbor master of this port, died on Sunday from the effects of a fall.

The steamers Chicago, Sheboygan and Muskegon will ply between here and Manitowoc in the future, and one of them will leave here every evening at 8 o'clock, except Sunday evening. The morning boat to Milwaukee has been withdrawn.

The schooner Lavinda met with a serious accident at Throop street bridge. She was being towed through the draw when the tug Prindiville attempted to pass her with a larger craft. It will take a week and will cost several hundred dollars to repair the vessel.

The tug Tom Brown ran into the yawl-boat of the schooner I. M. Forrest and completely demolished it.

The following quotation will be read with interest by members of the sailors' union: "Rule 3—That on and after to-day, Oct. 1st, union men are allowed to go by the trip, provided the trip be confined to one lake only, the Straits of Mackinaw to be included in Lake Michigan."

At Miller Brothers' drydock the schooner North Star was in for calking; the schooner J. Bean, Jr., for a new stem and some calking; the tug Minnie B. was at the derrick to get her stern bearing fixed; the schooner Australia got a leak stopped; the schooner J. V. Jones was calked all over; the propeller Messenger had her wheel fastened; the schooner Mercury had a leak stopped; the schooner Lillie Pratt got a new jibboom; the schooner J. Loomis McLaren, a new gaff; the schooner Watertown, a new mainmast and her decks calked; the steambarge Tempest got some new brasses; the tug Chicago had her stern bearing fixed; the schooner Maria Martin got a new mainboom.

T. W.

MONTAGUE.

Special to the Marine Record.

One of the new patent Pearson propeller wheels manufactured by Wilson & Hendrie, of this city, has been placed upon the steambarge R. C. Brittain, and her captain, who has tried several other wheels, states it is the best wheel he ever used, that he can get more speed out of the boat with fifteen pounds less steam than with the other wheels used upon her, and that the Pearson is the best backing wheel ever put upon a steamboat.

T.

RACINE.

Special to the Marine Record

Captain M. Paulsen stripped the schooner Advance and put out her chains at this port last week, and proceeded to Chicago on Tuesday to lay claim to the abatement of 30 per cent on her insurance, feeling sure that he would make more by so doing than by sailing her any more this season.

W.

BAY CITY.

The shipments for the month of September from Bay City amount to 76,000,000 feet of lumber, 15,500,000 shingles and 7,500,000 lath. From East Saginaw, 29,500,000 shingles and 1,500,000 lath. Total river shipments to date: Lumber, 584,000,000 feet; shingles, 115,000,000; lath, 43,000,000.

TOLEDO.

The tug Niagara, while trying to make Mason's dock, ran into the schooner C. M. Johnson, owing to her engine catching on the center. The tug was slightly injured.

The steamer Waite arrived in port at 11:30 a. m., having left Put-in-Bay at 7 a. m. She was unable to leave last night, owing to the storm, and much anxiety was at first occasioned by her non-arrival last night.

MARITIME LAW.

DEMURRAGE.

United States Circuit Court, Southern District of New York.

Gronstadt against Witthoff et. al.

Wallace, J The libelant as master of the ship Metropolis sues the consignees of part of her cargo for demurrage. The general cargo was shipped at Pillau under a charter party between the vessel owners and one Nordt, which provided among other things that the cargo might consist of empty petroleum barrels and rails to be carried to New York, and also provided that the cargo should be discharged in the same berth where the rails should be discharged. The respondent's barrels were shipped under a bill of lading which, among other things, provided that the barrels should be taken free from on board the vessel in four running days, with demurrage at £10 per day for longer, detention, and contained a clause "all other conditions as percharter party."

The vessel arrived at the port of New York on May 21, 1880, and upon the request of the owner of the iron rails, which was the major part of the cargo, went to the Erie Basin to discharged her cargo, and not being able to reach the wharf moored alongside another vessel. The barrels were above the rails. She remained practically in this position until the afternoon of May 31st, waiting to reach the wharf. The respondents having been notified on the 25th of her arrival obtained an order for the delivery of the barrels on May 26th, from the vessel's agent, being informed that the vessel was at the Erie Basin said they would send a lighter. The wharf owners objected to receiving empty petroleum barrels on their wharf. On the 27th, respondents notified the vessel's agent if there was no lighter alongside the vessel to put the barrels on the dock and give them notice. He replied that he was willing to put the barrels on the dock if the respondents would arrange with the dock owners to receive them then, and at the same time notified respondents he should hold them responsible for detention it they did not get the barrels out by the night of the 29th. Nothing more was done by the respondents until the morning of May 31st when they sent a lighter and the barrels were delivered on her. Four days were occupied in delivering to the lighter.

The bill of ladning adopted all the conditions of the charter party not inconsistent with its own terms. It has frequently held that when it is sought to charge a consignee or indorsee of a bill of lading with liability upon the conditions of a charter party there must be a plain reference to the charter party in the bill of lading and a plain indication of an intention to incorporate them into the contract. Young v. Moeller 5 E. & 755; Chappel v. Comfort 31 L. J. C. P. 58; Carr L. R. C. Q. B. 522; Russel v. Niemann Grey v. 33 L. J. C. P. 358. Here the language of the charter party is unambiguous and explicit, and it cannot be doubted is sufficient to adopt the condition of the charter party into the bill of lading. Smith v. Sieveking, 4 E. & B. 945; Wegner v. Smith 24 L. J. C. P. 25; Davis v. Wallace, 3 Cliff. 130. By thus adopting the terms of the charter party not inconsistent with those of the bill of lading the consignees of the barrels agreed with the carrier that their part of the cargo might be delivered at the same place where the iron rails should be delivered.

In the absence of such stipulation it is probable that the charter would have had the right to select the place of delivery, but it is clear that the respondents could not have exercised that right without the concurrence of the owners of the rest of the cargo, and that the master's duty toward them would be fulfilled if he selected a suitable and convenient place of the delivery of the whole cargo.

Under the present contract, however, it seems reasonable to conclude that it was the intention of the parties that the master should consult the convenience of the consignees of the rails in the selection of the place of delivery. This suggested not only by the language of the contract but by the situation of the parties and their relation to the cargo and to each other. The cargo was to be delivered at a port where it is well known there are serious difficulties in landing either iron or petroleum barrels in the usual places for landing general cargoes. Many wharf owners object to receiving iron upon their wharves on account of its weight and the danger consequent thereon, and many more object to receiving empty petroleum barrels because of their combustible character. And this construction of the meaning of the contract is enforced by that placed upon it by the parties themselves, all of whom concede that the master had properly proceeded to the place where he did proceed, and that under the circumstances it was the duty of the respondents to provide a lighter to receive their barrels. If an instrument is ambiguous, and both parties have acted upon a particular construction of it, that construction if in itself admissable will be adopted by the court. Chicago v. Sheldon, 9 Wall. 50, 54; Jackson v. Perrine, 35 N. J. L. 137: Stons v. Clarke 1 Met. 378; Forbes v. Watt L. R. 2 Sc. & D. 214.

The libellant followed the instructions of the consignee of the iron and proceeding to a place of discharge within the port where the iron could be deliverd on the dock, but where the dock owners would not permit the petrolum barrels to be landed. No objection was made by the respondents when it was suggested that they should provide a lighter; and they undertook to obtain one. They knew that the iron could not be discharged until their barrels were removed. In consequence of their delay the lay days expired.

It must be held that the libelant was not in fault because in selecting a place for the delivery of the cargo in conformity with the contract of the parties he selected one which was not altogether convenient for the respondents; that the lay days began to run after the ship reached the berth to which she was directed by the consignee of the rails; and that the detention of the ship was caused by respondents delay.

A decree for four days demurrage at £10 per day is directed, with costs to the libelant in the district court and the costs of this appeal.

(Endorsed) U. S. Circuit Court, Southern District, N. Y.—Grenstadt v. Withoff—Opinion Wallace, J.—U. S. Circuit Court—Filed July 30th, 1884—Timothy Griffith, Clerk.

LIENS ON VESSELS.

A suit of considerable importance to lake men was argued in the United States District Court, Buffalo, before Judge Coxe. The principal question is whether the companies who insure the vessel or cargo have a lien upon her for premiums which they can enforce, the same as in the case of the material man who furnishes the necessary stores and supplies to the vessel. Until within the past seven or eight years no claim of this kind was regarded as a lien upon a vessel, but Judge Brown, of the Michigan District Court, attempted to give insurers such a lien and so decided. Since that time several cases have arisen in which the question has been involved, but the United States Courts invariably refused to grant a lien or follow Judge Brown. In the present case the Thames and Mersey Union Insurance Company, of Pennsylvania, and the Continental Companies have again attempted to force a claim against a line of barges upon which the Hon. Robert Moat, of Montreal, holds a purchase money mortgage for $20,000. The suit involves a considerable amount of money and is being watched with interest by insurance men. The Judge's decision in the case is expected in a day or two.

THE MILWAUKEE LIBELED.

In the United States Circuit Court United States Attorney Luthill filed a libel on behalf of the government to recover $1,000 against the steambarge Milwaukee for damages to the outer pier and breakwater of the harbor, with which the Milwaukee collided on June 7th, last. The Milwaukee was bound for Grand Haven at the time, and as the night was very clear and all the harbor lights burning, nobody has ever been able to explain how she got near the breakwater. The vessel was not damaged at all by the collision, but, on the contrary, kept right on about her business.

THE SALVAGE OF THE SCHOONER BALDWIN.

The case in the United States District Court, Cleveland, by the Mechanics' and Traders' Insurance Company against the owners of the schooner H. B. Baldwin has been settled and the money in the custody of the court ordered paid to those entitled to it. The schooner went aground near the foot of Erie street. It was loaded with iron ore. The insurance company raised the vessel and it was sold for $2,200. The insurance company then began a suit against the owners to compel them to pay their pro rata share. The court ordered $2,000 paid to the insurance company and the remainder to L. P. and James Smith, who are to pay the costs.

THE DIMICK CASE.

In the Crosby-Dimick case a motion was made in the special term of the Superior Court, Buffalo, to confirm the report of the receiver as to the books, etc. The decision was reserved.

BOILERS OVER THREE YEARS OLD CANNOT BE TESTED.

Treasury Department, Aug. 28, 1884.

Gentlemen:—Replying to your letter of the 15th instant, asking permission to have a piece of the shell of your small marine boiler tested, you are informed that the boiler referred to having been built two or three years, the permission asked for cannot be granted, and that even if the boiler was of recent construction, the restamping could be done only by the manufacturer of the plates.

To Messrs. Donaldson & Howard,
Phenix Iron Works, Buffalo, N. Y.

LAUNCH OF THE ETRURIA.

John Elder & Co. launched from their shipbuilding yard at Fairfield, Glasgow, on the 22d of September, a large steel screw steamer which has been built to the order of the Cunard Steamship Company for their line of steamers running between Liverpool and New York. This steamer is a sister to the steamship Umbria, recently built by the same firm. The dimensions of the vessels are: Length over all, 520 feet; breadth extreme, 57 feet 9 inches; depth to upper deck, 41 feet; and to promenad deck, 49 feet. with a gross tonnage of about 9,000 tons. She is entirely built of steel throughout, and is not classed in any of the societies, being built to the owner's requirements, which are in excess of the requirements of the rules for any class. The vessel is divided into ten water-tight compartments, most of the bulkheads being carried up to the upper deck and fitted with waterproof doors, giving access from one part of the ship to the other. By this arrangement the danger of fire spreading, should it break out in any division of the ship, is removed as far as possible, and greater safety is obtained by being able to isolate any department for sanitary purposes, or in case of damage the compartment being flooded. The dining saloon is 76 feet long, extending the full breadth of the vessel, the height from beam to beam being 9 feet. The saloon is arranged with a large cupola skylight fitted on the promenade deck, the total height from the saloon floor at the cupola being over twenty feet. Altogether accommodation can be provided for 720 first-class passengers, the largest number of which are arranged for two-berth state-rooms only, and will be replete with all fittings usual in the highest class of passenger steamers, a number of the rooms being fitted en suite for family use. The greatest care has been taken in the lighting, ventilation, and sanitary arrangements throughout. The vessel will be fitted with three masts, full bark rigged. The engines are to indicate upward of 12,000 horse power. They are compound, having three inverted cylinders, one high pressure 71 inches in diameter, and two low pressure, each 105 inches in diameter. The high pressure cylinder is placed between the two low pressure cylinders and all are adapted to a stroke of six feet. The vessel, as it left the stays, was gracefully named the Etruria by the Duchess of Manchester in the presence of a distinguished company of ladies and gentlemen. After the launch a numerous company adjourned to the drawing office, where luncheon was served. Mr. Pearce, of John Elder & Co., who presided, was supported by the dowager Duchess of Manchester, the Duke of Sutherland, the Earl of Shaftesbury, Sir Michael and Lady Shaw Stewart, Lord Tarbett, the Lord and Lady Evelyn Ashley, Sir Archibald and Lady Campbell, Mr. Blackwood, C. B., Chief Secretary of the Postoffice, Captain Shaw, of London, the Honorable Waldgrave Leslie, Mr. John Burns, chairman of the Cunard Company, Mrs. McKay, Count and Countess Telefner, Lord Provost McConie, Miss Emily Faithfull, and Major Loraine. The toast of the Queen having been honored, Pearce proposed success to the Etruria and prosperity to the Cunard Company. In the course of his remarks he said: "Time was, and not long ago, when people said these fast ships were a great mistake, and that we should very soon leave off building them. The best proof that we have that they are not a mistake is that they continue to be built, and the recent fast vessels are simply the forerunners of others that will certainly surpass them before many years on the Atlantic.

HOW TO DETERMINE THE DISTANCE OF AN OBJECT ON THE SEA.

It is amusing to note how ignorant many ordinary seamen and nearly all sea travelers are of such matters as the distance of the sea horizon, the way in which a ship's place at sea is determined, and other such matters—which all seamen might be expected to understand, and most persons of decent education might be expected to have learned something about at school. Ask a sailor how far off a ship may be, which is hull down, and he will give you an opinion based entirely on his knowledge of the ship's probable size, and on the distinctness with which he sees her. This opinion is often pretty near the truth; but it may be preposterously wrong if his idea of the ship's real size is very incorrect, and is sometimes quite wrong even when he knows her size somewhat accurately.

Any notion that the distance may be very precisely inferred from the relative position of the hull and the horizon line seems not to enter the average sailor's head. During my last journey across the Atlantic we had several curious illustrations of this. For instance, on one occasion a steamer was passing at such a distance as to be nearly hull down. From her character it was known that the portion of her hull concealed was about twelve feet in height, while it was equally well known that the eye of an observer standing on the saloon passenger's deck on the City of Rome was about thirty feet above the water level. A sailor (asked by way of experiment) how far off the steamer was, answered, "Six or seven miles." "But she is nearly hull down," some one said to him. "A didn't say she warn't, as I knows on," was the quaint but stupid reply. Now, it might be supposed to be a generally known fact, that even as seen from the deck of one of the ordinary Atlantic steamers, the horizon is fully six miles away, the heighth of the eye being about eighteen or twenty feet, and that for the concealed portion of the other ship's hull a distance of four or five miles more must be allowed; so that the man's mistake was a gross one. And several other cases of a similar kind occurred during my seven days' journey from Queenstown to New York.

The rules for determing the distances of objects at sea, when the heighth of the observer's eye and the heighth of the concealed part of the remote object above the sea level are both known, are exceedingly simple, and should be well known to all. Geometrically, the dip of the sea surface is eight inches for a mile, four times this for two miles, nine times this for three miles, and so forth; the amount being obtained by squaring the number of miles and taking so many times eight inches. But, in reality, we are concerned only with the optical depression, which is somewhat less, because the line of sight to the horizon is slightly curved (the concavity of the curve being turned downward.) Instead of eight inches for a mile, the optical depression is about six inches at sea, where the real horizon can be observed. But substituting six inches for eight, the rule is as above given.

Six inches being half a foot, we obtain the number of six inch lengths in the heighth of an observer's eye by doubling the number of feet in that heighth; the square root of this number of six inch lengths gives the number of miles in the distance of the sea horizon. Thus, suppose the eye of the observer eighteen feet above the sea level; then we double 18, getting 36, the square root of which is 6; hence the horizon lies at a distance of six miles as seen from an elevation of eighteen feet. For a heighth of thirty feet, which is about that of the eye of an observer on the best deck of the City of Rome, we double 30, getting 60, the square root of which is 7.7; hence, as seen from that deck the horizon lies at a distance of 7 7-10 miles. If the depth of a part of a distant ship's hull below the horizon is known, the distance of that ship *beyond the horizon* is obtained the same way. Thus, suppose the depth of the part concealed to be 12 feet, then we take the square root of twice 12, or 24, giving 4.9, showing that the ship's distance beyond the horizon is 4 9-10 miles. Hence if a ship is seen so far hull down, from the hull of the City of Rome, we infer that its distance is 4 9-10 miles beyond the distance of the horizon, which we have seen to be 7 7-10 miles—giving for that ship's distance 12 3 5 miles. And with like ease may all such cases be dealt with.—*R. A. Proctor in Newcastle Weekly Chronicle.*

Acting Secretary of the Treasury Coon has rendered a decision in the case of the tug Mariel, which is very distasteful to the special Treasury agents who reported her for carrying passengers. July 4th last the Mariel had on board a party of ladies and gentlemen, guests of her owners, Singer & Talcott, and she made a short excursion on the lake. As she did not have any permit for carrying passengers Collector Spalding fined her $500 for violating the passenger law. Mr. Singer appealed from the collector to the United States Court, and the Mariel was seized by the government. She has been in the hands of a custodian ever since, until Friday, when a communication was received from Mr. Coon stating that the fine had been remitted. The attachment was withdrawn, and the custodian in possession of the Mariel discharged. The tug will go into commission again shortly.

PILOT RULES FOR THE LAKE AND SEABOARD.

EXTRACTS FROM REVISED STATUTES.

SEC. 4233. The following rules for preventing collisions on the water shall be followed in the navigation of vessels of the navy and of the mercantile marine of the United States.

STEAM AND SAIL VESSELS.

RULE ONE. Every steam vessel which is under sail, and not under steam, shall be considered a sail vessel; and every steam vessel which is under steam, whether under sail or not, shall be considered a steam vessel.

LIGHTS.

RULE TWO. The lights mentioned in the following rules, and no others, shall be carried in all weather, between sunset and sunrise:

RULE THREE. All ocean going steamers, and steamers carrying sail, shall when under way, carry—

(A) At the foremast-head, a bright white light, of such a character as to be visible on a dark night, with a clear atmosphere, at a distance of at least five miles, and so constructed as to show a uniform and unbroken light over an arc of the horizon of twenty points of the compass, and so fixed as to throw the light ten points on each side of the vessel, namely, from right ahead to two points abaft the beam on either side.

(B) On the starboard side, a green light, of such a character as to be visible on a dark night, with a clear atmosphere, at a distance of at least two miles, and so constructed as to show a uniform and unbroken light over an arc of the horizon of ten points of the compass, and so fixed as to throw the light from right ahead to two points abaft the beam on the starboard side.

(C) On the port side, a red light, of such a character as to be visible on a dark night, with a clear atmosphere, at a distance of at least two miles, and so constructed as to show a uniform and unbroken light over an arc of the horizon of ten points of the compass, and so fixed as to throw the light from right ahead to two points abaft the beam on the port side.

The green and red light shall be fitted with inboard screens, projecting at least three feet forward from the lights, so as to prevent them from being seen across the bow.

RULE FOUR. Steam, vessels when towing other vessels, shall carry two bright white mast head lights vertically, in addition to their side lights, so as to distinguish them from other steam vessels. Each of these mast head lights shall be of the same character and construction as the mast head lights prescribed by the rule three.

RULE FIVE. All steam vessels, other than ocean-going steamers, and steamers carrying sail, shall, when under way, carry on the starboard and port sides lights of the same charter and construction and in the same position as are prescibed for side lights by rule three, except in the case provided in rule six.

RULE SIX. River steamers navigating waters flowing into the Gulf Mexico, and their tributaries, shall carry the following lights, namely: One red light on the outboard side of the port smoke-pipe, and one green light on the outboard side of the starboard smoke-pipe. Such lights show both forward and abeam on their respective sides.

RULE SEVEN. All coasting steam vessels and steam vessels other than ferry boats and vessels otherwise expressly provided for, navigating the bays, lakes, rivers, or other inland waters of the United States, except those mentioned in rule six, shall carry the red and green lights, as prescribed for ocean going steamers; and, in addition thereto, a central range of two white lights; the after light being carried at an elevation of at least fifteen feet above the light at the head of the vessel. The head light shall be so constructed as to show a good light through twenty points of the compass, namely: From right ahead to two points abaft the beam on either side of the vessel; and the after light so as to show all around the horizon. The lights for ferry boats shall be regulated by such rules as the board of supervising inspectors of steam vessels shall prescribe.

[Diagrams representing the positions of vessels and the precautions to be taken by them will be given under this heading in our next issue. In presenting these articles to our readers, we do not infer that they do not understand the rules on the subject, but we give them as a matter of reference and to keep them before the mind in view of the many recent collisions.]

Little success has so far attended the efforts of Captain Merryman to find the valuable raft of oak timber, reported to have been lost in Chippewa Bay at the breaking out of the war in 1812. Previous to going to Presqu' Isle to blow up the schooner Trenton, he sounded the bottom of the bay in several places, but without finding the raft. He found however, inside Cedar Island, at a point far removed from the place where the raft was supposed to be, four large sticks of oak in an excellent state of preservation, and will at once take steps to raise them. He is of the opinion that these sticks never belonged to the ratt, but thinks they were hauled out on the ice by timber cutters and went down before they could be removed. The search for the raft will be further prosecuted.

CAPTAIN GOLDSMITH AND THE PROGRESS.

The steamer Progress, which has been making rapid trips between this port and Escanaba, leaves this port this morning for Buffalo, where she loads coal for Milwaukee, a brief change in her sailing for the past month or two. She would have got away Monday but for the breaking of an eccentric to her engine, one of the few slight mishaps she has ever had. Her master Captain L. B. Goldsmith is one of the most successful, if not one of the oldest commanders on the lakes. The former is evidenced by the good time his vessel has made this season, and the significant fact that while the ship Progress hails from Milwaukee her master's home is in Kingsville, this state. That he is now sixty-four years old, and sailed ever since he was a lad of twelve years, undoubtedly establishes his claim as among the oldest men on the lakes. The first craft in which he sailed was the schooner called the Alert, and the next the schooner Columbus. The latter was a vessel of about sixty five tons burden, and both were largely engaged in trade between this port and Buffalo, sometimes Toledo, Detroit, and Chicago, and in the days before harbor tugs were brought into use and each vessel made her harbor under sail. The first vessel Captain Goldsmith commanded was the schooner Minerva, but in a year or two he came in command of the Florida, which was counted among the twenty or thirty wrecks toward the close of the season of 1844. She found her grave about two miles from Point Abino, on the Canada side, having in her at the time Akron flour, pork, hemp, and high wines. In 1855 Captain Goldsmith came in command of the first steamship he ever sailed. This was the Empire State, which, in the following year had her engine taken out of her and put into a new steamer called the Western Metropolis and the old hull used for drydock purposes. The Western Metropolis, with the City of Buffalo, the Michigan Southern, and Northern Indiana, the first two being 350 feet over all, and the latter 303 feet, were four fine passenger vessels sailing between this port and Buffalo, sometimes Buffalo and Toledo, and in other years making all three ports. They did an immense trade and passenger traffic up to the era of the Lake Shore railroad, when they were bought up by the latter corporation. During these years on the lakes Captain Goldsmith sailed as mate one season in the schooner Albany, which was lost about two years after she was built in a voyage between Mackinaw and the Sault in the days when schooners carried passengers. She had on board at the time she went ashore 125 passengers, all of whom were taken off, but the vessel herself, although nearly new, was abandoned by her owners. Several years afterward, however, with better wrecking facilities, she was got off by another company and is said to have done successful sailing for nearly twenty-five years. A schooner called the Scotia, built by Messrs. Gilbert & Haycox, at this port, at a point on the river just below Superior street, is another vessel with which Captain Goldsmith had to do. He took a hand in rigging her out, and was so engaged when the news of the burning of the steamer Griffith was received at this port. This dreadful calamity, which cost several hundred passengers their lives, took place a short distance this side of Willoughby creek, in about the year 1857.—*Leader*.

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Eastward.	Arrive	Depart.
No 4. Fast Limited Express	*1 10 A M	*12 05 A M
No 8, N Y, B & A Express	*6 35 A M	*7 00 A M
No 26, Elyria Accommodation	†8 05 A M	
No 35, Buffalo Ac'm via Sandusky	†10 35 A M	†10 50 A M
No 35, Toledo Accom via Norwalk	†10 35 A M	†10 50 A M
No 12, N Y & B Fast Express	*1 55 P M	*2 25 P M
No 14, Special N Y & Bos Expres		5 00 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 42 P M	
No 26, Conneaut Accommodation	†4 25 P M	

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*11 55 A M	*12 05 A M
No 23, Mich Express via Sandusky	*2 15 A M	*2 35 A M
No 3, Chicago Express via "	†6 05 A M	6 30 A M
No 25, Mich Accom Norwalk		†6 10 A M
No 21, Toledo Ex via Norwalk	†12 55 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	†12 15 P M	12 40 P M
No 9, Chi Pac Fx via Norwalk	*6 06 P M	*6 30 P M
No 31, Elyria ac to Elyria only		†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	

Sunday train for Nottingham—Depart 8:30 a. m. and 1:45 p. m.; returning, leave Nottingham at 9:05 a. m. and 3:45 p. m.

Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.

For full information as to trains and connections apply at the new city ticket office, corner Seneca and St. Clair streets, Lake Shore block.

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Commencing Sunday, June 8, 1884, trains of the Bee Line—Cleveland, Columbus, Cincinnati & Indianapolis Railway—will leave and arrive at Cleveland as follows, CENTRAL STANDARD TIME, 33 minutes slower than Cleveland time:

	Depart.
No. 3, Columbus, Cincinnati & Ind Ex	7:00 A M
No. 23, Galion & Wheeling Express	6:40 A M
No. 9, Col., Cin., Ind & St. Louis Ex	*6:40 P M
No. 5, Col. Cin., Ind. & St. Louis Express	*12 35 P M
No. 27, Galion & C.L & W. Acc	4:00 P M
No. 29, Massillon & Ulrichsville Ex	5.00 P M
	Arrive.
No. 8, Col, Cin, Ind. & St. Louis Exp	*6:40 A M
No. 20, Uhricsville & Massillon Ex	9:00 A M
No. 2, Col. Cin. & Indianapolis Express	9:50 P M
No. 14, St, Louis, Ind.. Cin. & Col. Ex	*4:45 P M
No. 22, Galion Acc	10:00 A M
No. 26, Wheeling Accom	4:30 P M
No. 4, Col., Cin. & N. Y. Express	1:15 A M

Trains marked * daily, all other trains daily except Sunday

E. B. THOMAS, General Manager. O. B. SKINNER, Traffic Manager.

A. J. SMITH, General Passenger Agent.
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6.50 a. m. ATLANTIC EXPRESS—(Daily) Pullman sleeping and hotel coaches from Leavittsburgh 8:35 a. m. to New York, Albany and Boston without change. Arrive at Meadville at 10:40 a. m. (dinner) Franklin at 12:08 p. m, Oil City 12:30 p. m, Corry 12.35 p. m, Jamestown (Lake Chautauqua) 1.35 p. m, Buffalo 5:50 p. m. Rochester 8:20 p. m.; Hornellsville 6:00 p. m. [supper]; Corning 7:25 p. m. Elmira 8:05 p. m. Binghanton 10:05 p. m., Albany 5:00 a. m. Boston 1:45 p. m.; arriving at New York 6:15 a.m.

2:20 p. m. LIMITED EXPRESS—Through Pullman sleeping coach from Cleveland to New York. Arrives at Meadville at 6:30 p. m, Jamestown 8:47 p. m., Salamanca 9:45 p. m., New York 10:10 a. m.

11:00 p. m. NIGHT EXPRESS—(Daily except Sunday) Seeping coach from Cleveland Hornellsville. Arrive at Youngstown at 1:50 a. m., Meadville 3:25 a. m., Corry 4:59 a. m. Jamestown 5,57 a. m, Buffalo 9:20 a. m., Rochester 12:58 p, m., Hornellsville, 11:00 a m, Corning 12:07 p m, Elmira 12:40 p. m., Binghampton 2:19 p m, New York 9:10 p. m. Arrive at Pittsburgh 5:50 a. m., without change.

2:20 p. m. PITTSBURGH EXPRESS — Daily — Through without change, Parlor car attached. Arrives at Youngstown 5:00 p m., Pittsburg 8:02 p. m., Washington 7:09 a. m, Baltimore 8:19 a. m.

4:11 p. m. MAHONING AOMMODATION — Stopping at all way stations, arriving at Youngstown 6:55 p. m., Sharon 8:01 p. m., Sharpesville 8:10 p. m.

6:50 a. m. PITTSBURGH EXPRESS — Daily — Through without change. Arrives at Youngstown 9.30 a. m., Sharon 10:30 a. m., Sharpsville 10:40 a. m., Pittsburgh 12 45 p m., Returning, leaves Pittsburgh at 4:15 a. m., 7:45 a. m., 12:55 p. m., and 3:45 p. m.

10 35 a. m. YOUNGSTOWN AND PITTSBURGH ACOMMODATION—Stopping at all Way stations, arriving at Youngstown 1:40 p. m., Pittsburgh, 5.45 p. m.

Trains arrive at Cleveland, 6:15 a. m., 6:30 p. m., 10.20 a. m; 1:05 p. m., and 9:45 p. m,

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Following is the time in effect June 1. 1884, and until further notice:

GOING EAST.

Lv.	Chicago	7.50 a. m.		
Arr.	Valparaiso	9.45 "		
"	Fort Wayne.	1.30 p. m.		
"	New Haven..	2.05 "		
"	West Leipsic.	3.56 "		
"	Arcadia	4.49 "		
"	Fostoria	5.00 "		
"	Green Springs	5.45 "		
"	Bellevue	6.10 "		
Lv.	Bellevue	6.20 "	7.55 a. m.	
Ar.	Lorain	7.50 "	9.16 "	Accom.
Arr	Cleveland	9.02 "	10.22 "	
Lv.	Cleveland		10.27 "	3.52 p. m
Arr	Painesville		11.33 "	5:05 "
"	Ashtabula		12 25 p. m.	6.08 "
"	Conneaut		12.50 "	6.30 "
"	Erie		2.09 "	
"	Dunkirk		3.47 "	
"	Buffalo		5.20 "	

GOING WEST.

Lv	Buffalo	9.50 a. m.		
Arr	Dunkirk	11.24 "		
"	Erie	1.23 p. m.		Leave
"	Conneaut	2.20 "		6.15a. m.
"	Ashtabula	2.51 "		6.46 "
"	Painesville	3.44 "		7 43 "
"	Cleveland	4.52 "		8.55 "
Lv	Cleveland	4.57 "	6.47 a. m.	
Ar.	Lorain	6 12 "	7.35 "	
Arr	Bellevue	7.35 "	9.10 "	
Lv	Bellevue		9.20 "	
"	Green Springs.		9.44 "	
"	Fostoria		10.22 "	
"	Arcadia		10 34 "	
"	West Leipsic		11.30 "	
"	New Haven		1 35 p. m.	
"	Fort Wayne		1 50 "	
"	Valpraiso		5.42 "	
"	Chicago		7.50 "	

Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of ticket desired. Baggage checked to destination.

For information, call on nearest agent of the Company, or address

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A. A. POMEROY, Editor and Proprietor.

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CLEVELAND, OHIO, THURSDAY, OCTOBER 2.

NEW FEEDERS FOR LAKE CARRIERS.

Recent action of the officers of two great trunk lines, the Northern Pacific and Canadian Pacific railroads, promises a new source of business for lake carriers, which, if it does not materially increase the carrying rate, will prove an important factor in keeping in activity the ships now sailing and any number that may be built to meet the demand in the future; but at the same time it will deprive the ocean grain carriers of a portion of the business they have heretofore had. Agents of the Northern Pacific railroad, in order to increase the business of that road, have been busy for some time to this end, and circulars have been issued saying that the road is prepared to convey grain from all points on its line to Duluth, and thence by way of the lakes to New York and Liverpool, at a great reduction from the cost by the Cape Horn route, and, as will be seen, in much less time. This new course for cereals of the Pacific coast is but natural and was outlined in these columns some months ago. The fact that new and large elevators are now being built at Duluth and other points at the head of lake navigation, together with the proposed improvement of the canals are arguments tending to strengthen the belief in the correctness of this theory.

In the meantime the officials of the Canadian Pacific road, and others interested, have not been idle. Stock companies have been organized for the purpose of building elevators near the Canadian boundary line for the storage of vast quantities of wheat, and agents are engaged in the northwestern states and Manitoba buying wheat, for which they promise to pay five cents per bushel more than can be obtained in the Duluth or Minneapolis markets. The obvious intention of this syndicate, in direct competition with the Northern Pacific party, is to make Port Arthur the shipping point for the Montreal or Liverpool market direct. It is hoped, by this means, to regain the advance in price paid for the wheat and at the same time secure for the road an enormous increase of business. The fact that the grain of the great northwest will find its way over the lakes to market is apparent. In order to make it possible to use the larger class of lake vessels in this trade the Canadian government has recently decided upon the improvement of the St. Lawrence system of canals, recommending that a standard depth of fourteen feet be reached; but it will reflect much more credit on the management of the Welland canal if a depth of sixteen or eighteen feet be attained, as was suggested in the MARINE RECORD last week. It is possible that these improvements would draw off some of the business which the Erie canal now enjoys; nevertheless, Erie, being free, will retain sufficient patronage for all purposes, provided for by the increased quantity of grain in transit. It may be said that the grain will not move without a demand for it, but it is thought the possible reduction in the cost of transportation will enable American wheat to compete with that of India in the European markets. India has, in the last three years, more than doubled her wheat production and has become the most successful rival of America in the grain markets of the world. It is to be hoped that this new route will enable the United States to hold the first place among wheat producing countries and at the same time give employment to her merchant marine on the great lakes.

THE BUSINESS OUTLOOK.

As regards the general condition of business throughout the country, very little change from that prevailing for a month past can be noted, and from the standpoint of the interest for which we write, the marine, all things considered it is quite discouraging, although not bad beyond precedent. It is said that several prominent ship owners have already declared they will withdraw their fleets on the 15th of October, but we trust events will transpire in the meantime which will show them that this conclusion is premature. We know that insurance rates are high and the rates paid for carrying quite low, all of which is likely due to the depressed condition of the iron market especially in the east, and the slow demand for grain. It is true that at this time, when freights should naturally stiffen and advance, many vessels are compelled to lie idle at their docks and the men dependent upon their activity out of employment, but such evils are generally contengent upon the unsettled condition of the business interests of the country during a presidential campaign. The trade in anthracite coal shows no improvement, and it has been decided to do no work in a great majority of the colleries during the first week in October and other periods of suspension will doubtless be added before the close of the year, while the iron and steel trade is still sluggish. Trade in the western centers continues more advanced, however, than in the east for the reason that we are nearer to the centers of agricultureal production, from which there has already been enough grain sent to market to make a perceptible increase in sales of mercandise. The corn crop is now assured, and will give the country in due time a very great help toward solid prosperity; the only discussion is as to the date when it will make itself felt, and the balance of opinion inclines toward postponing this beyond December. The movement of lumber has had the effect of keeping a great number of wheels turning that would have been idle but for the improvement in the market for that commodity, and it is said that money is everywhere in good supply for proper merchantile wants, and the liberal scale of exports from New York keeps the foreign exchanges down at a point which seems to guarantee the money market against serious disturbance for some time to come.

A CIRCULAR has been received by the steamboat inspectors from Washington which stated that an assistant inspector of the steamboat inspecting service had been appointed to examine and pass upon all life saving apparatus and life preservers, and brand them at the manufactories before they can be used on the boats. The life preservers now in use will be examined by the local examiners. In this respect it would be in order to note the correct business principles followed by Mr. David Kahnweiler, 146 Worth street, New York, manufacturer of the "Neversink Cork Jacket," ring buoys, and other life preserving articles, who had on hand seven hundred life preservers when the inspector called. A rigid test was made and every one found correct and stamped according to law. Beside having the required buoyancy they are made of superior material and workmanship. Some makers had hundreds rejected by the government inspector.

UNQUESTIONABLY the Duluth and Iron Range Road is now, and is calculated to be in the immediate future more so, an important factor to the development of Duluth. The road is now running between Two Harbors, thirty miles from here on the north shore, to the iron range at Lake Vermillion, and a quantity of splendid ore has already been shipped, mainly to Cleveland. The offices of the company are located at Duluth, and the connecting line between Duluth and Two Harbors will be built inside of a year, under penalty of the forfeiture of a valuable land grant. Blast furnaces and rolling mills are to be established at Duluth, beside the one already built, on completion of the road, to be run in connection with the company's operations.

AN inventor named Cardoso de los Rios, of New Orleans, has invented a propelling wheel for steamers that bids fair to revolutionize the present system of driving vessels. For at least a decade ship builders have despared of increasing the size of ships on account of the impossibility of providing them with propellers of sufficient force to warrant an attainment of reasonable speed. This assertion is based on the fact that deep water sea ports are scarce and thirty feet channels may be considered the standard of first-class ports, while on the lakes vessels drawing more than twenty feet cannot do business. Especially is this true in crossing the limekilns at the mouth of the Detroit river. As a sequence, efforts have been made to secure favorable results from the application of several small propellers, but the results of such deviation from the general rule have not, heretofore, been as favorable as could be desired. The announcement, therefore, that Mr. de los Rios' wheel consists of a screw of small diameter with force enough by its model to drive the largest ship at a maximum of speed at a minimum consumption of fuel will be hailed with delight by all ship builders.

THE fact that collision with waterlogged and abandoned ships is much to be feared the government should take precautions to have them looked up and disposed of. In January last the crew of the lumber laden schooner Maggie M. Rivers, which had become waterlogged, deserted her near Cape Hatteras. Since that time the hull of the specter schooner has been drifting with the winds, a constant menace to ocean travel. The water-worn craft, covered with barnacles, is now believed to be nearly in the path pursued by ocean steamers and may again be heard from as the cause of a serious collision and ocean disaster.

AN inventor with an air-tight lifeboat last week sent it down the Niagara rapids below the falls and through the whirlpool. It passed through once all right, though it had turned over twice and shipped about three inches of water. It was sent in a second time, was knocked about in the whirlpool for an hour and a half and then came out in minute pieces. Navigation of the rapids of Niagara will not be profitable.

THE Iron Trade Review, published by Day & Carter, Cleveland, comes to us this week in an entire new dress. A new dress is always hailed with pleasure by the reader and we compliment the publishers of this valuable class paper on the good taste and fine appearance it presents.

LAUNCH OF THE SYRACUSE.

Special to the Marine Record.

DETROIT, September 30.

The steamship Syracuse, twin sister to the Albany, was launched at Wyandotte, twelve miles below this city, on Saturday, at 11 o'clock a. m., in the presence of a respectable crowd, and from the first was a decided success. She was launched broadside and threw up a large avalanche of water, which splashed on men, women and children on the opposite side and much amused the spectators. As is generally known, both these new steamers are built of steel and are the only ones of the kind on the whole chain of lakes, and as regards model and general appearance, it is not going too far in stating they are not excelled, and as regards strength, have no superior. The Syracuse is of the following dimensions; Length of keel, 267 feet; over all, 282 feet; breadth, 38 feet 6 inches; molded depth, 17 feet 6 inches; depth of hold, 15 feet 8 inches; between decks 8 feet 8 inches; sheer forward, 6 feet; aft, 3 feet 6 inches. Below the main deck the hold is divided into seven compartments by watertight bulkheads, the forehold by a deck of steel worked over frames and connected with the outside plating. The frames are 3x4½ inches, spaced 22 inches between centers; reverse frames, 3x3 inches; floors, 21 inches deep; main deck beams, 9 inches deep; hold beams, 8 inches deep; thickness of bottom plates, ¾ inch; side plates, ½ inch. The hull is double riveted throughout. The ship has five gangways on each side, and the cargo holds are provided with double hatches and hand and power winches for working the cargo. The two boilers are steel, 16 feet in length and 9 feet diameter of shell. Her machinery, which was manufactured by the Detroit Drydock engine works, is a fore-and-aft compound, the cylinders being 28 and 48 by 48, with steam reversing gear. The fit out of the Syracuse was furnished by the house of J. P. Donaldson & Co., and includes a "Providence" windlass, from the American Ship Windlass Co., which is fast superseding all other windlasses on the lakes as well as on the ocean. She is calculated to show a speed of twelve miles per hour and to carry 2,250 tons or 85,000 bushels of grain, and will run in the New York Central & Hudson River Line, between Buffalo, Milwaukee and Chicago. In short, the dimensions of the two steamers are precisely alike and that of the Albany was given in the RECORD immediately after launching. The new steamer was at once towed up to Detroit for immediate completion. Both vessels were built for the Western Transit Company, each costing in the neighborhood of $200,000. Captain Robert Jones, a Buffalo man and an excellent navigator, will command the Syracuse.

J. W. H.

OBITUARY.

Captain T. W. Steel, a former resident of Cleveland, died suddenly in Chicago on Sunday last, and his remains were brought to this city for burial in Woodland avenue cemetery. The funeral, which took place on Wednesday, was conducted by the Oriental Commandery, Knights Templar, of which ancient and honorable body Captain Steel had long been a brother. Captain Steel, who was about 62 years of age, was a well known and popular lake captain, and was master of the propeller New England, of the People's line, in 1851, plying between Detroit, Cleveland and Sandusky. He brought out the Galena, built by L. Moses, in 1857, under the management of Shelden Peas, of the Central Line of Buffalo, after which he retired from the lakes and moved to Chicago about 1862, where he was soon appointed harbor master, which position he filled to the satisfaction of all for seven years. Up the time of his death Captain Steel had the confidence and respect of all who knew him, and his death will be much regretted.

[*Continued from 1st Page*]

FRANKFORT.

Special to the Marine Record.

The storm signal station at this place has not been in operation for a year past, but has lately received orders from the War Department to resume. I. W. Gaines is the display man.

The wrecking schooner Experiment is in our harbor. She has been at work at the wreck of the schooner John B. Wright, lost near Little Point Sauble, Mich., in 1854. They recovered 1,135 kegs of nails out of the wreck, some in very good condition. The hull of the Wright is still in good order, the forward part of the deck and some deck beams are still there. The Experiment has on board a miscellaneous lot of relics picked up from the bottom of Lake Michigan, consisting of anchors, chains, capstans, propeller wheels, windlasses, etc., from sunken craft, from what hulks or where it can not be ascertained, as divers are not very communicative as to where they were found.

C. B.

PORT COLBORNE.

The schooner C. A. King, bound from Milwaukee to Kingston with a cargo of wheat, passed down Tuesday night. It is quite probable that her cargo is badly damaged, as the vessel had considerable list on her starboard side. Her captain is evidently of that opinion, as he filed a protest at this port in which he states that the vessel encountered severe storms on her way down. The cargo shifted and the vessel was in danger of foundering. Heavy seas boarded her and at one time the cabin was almost filled with water.

DETROIT.

Special to the Marine Record

September 30.—In my last communication I had only time and space to state that the wrecking steamer Winslow, Captain Martin Swain, had arrived with the wrecked schooner Monticello and that she was in drydock. As the undertaking from first to last was a very important one in that line of business, and in order to do justice to all concerned, I will briefly enlarge upon it. As a wrecking master Captain Swain had doubtless no superior, but the dangers and risks attending such operations fall as well on others who are deserving of mention, and of whom the submarine diver should be entitled to special notice. On this occasion Mr. John J. Jarvis, a well known submarine diver, rendered important service. The Monticello was taken hold of submerged near Hen and Chicken reef, and towed eleven miles into American waters, and a vessel taken to her with which to right her up, and then towed into 14 feet of water. At this point Mr. Jarvis put on his armor, went down and found a hole in her 9 feet by 6 in dimensions. While under water he put in false frames and planked them up in one day, after which she was towed to Detroit.

Canadian vessels are notified by the United States authorities that henceforth they must be prepared with a manifest containing a description of cargo, in the event of meeting a United States revenue cutter within three miles of an American port, or be fined $500. The cutters will rigidly enforce this order.

During the past twenty-six hours twelve steambarges and forty-six vessels have passed this port, having in the aggregate something over twenty million feet of lumber.

The owners of the steambarge Henry Howard, recently burned on St. Clair river, are being sued for $1,200 for the non-delivery of a cargo, according to contract. She was insured for $9,000 and valued at $12,000.

The steambarge C. F. Curtis a few days ago made a quick passage from Buffalo to Detroit, with two barges in tow, performing the distance in twenty-two hours, which was the best lake steamers could do in bygone years.

The rafting for the season is over and can not be done now except at extreme hazard. The steambarge Manistique is at present en route with probably the last one of the season, and is now sheltered at Sand Beach until the present boisterous weather is over. Before starting with her raft the Manistique stranded on Black River reef, Lake Huron, but was got off without serious damage.

Within a few days past we have been having a series of fall gales which are prevalent at this time of the year but are more violent later on. Of late years they have been far less destructive than those experieneed in the olden time. There are yet many of our lake men who will remember the tornadoes (for they were little short of that,) in 1835, 1837, and 1839 and in October 1844, at which periods the loss of life and property was fearful beyond all account. The fall of 1860 will be long recollected, at which time several steamers and vessels were lost, with all on board. In all these periods the record of Lake Erie was the most destructive of all others.

The steamer C. H. Merritt, which plies between Detroit and Chatham, is receiving a new boiler at the latter port, which will be a great improvement on the old one, being about one fifth larger. She will be ready to begin regular trips on Tuesday.

C. F. Dunbar, who has the contract for the improvement of the Lime Kiln crossing, is about to begin work.

Messrs. Parker & Miller are prepared to do wrecking and towing with the tugs Phoneix, Sweepstakes and Crusade, James Quinn will do the diving and C. Leahy run the pumps.

The Evening Star, which has been plying between Detroit and Toledo this season, will lay up for the season on October 1st.

The steamer Chief Justice Waite which visited here on Thursdays with excursionists has discontinued for the season.

To partly supply the routes between this city and points below the steamer Massasauga will commence on Thursday running as far as Gibralter.

Grain shipments have been somawhat brisk for the past few days at last quoted rates, 1¾c to Buffalo and 4½c to Oswego.

The schooners Elgin which was reported wrecked in Georgian Bay ten days ago has arrived at Windsor with lumber and notwithstanding the report of her disaster was apparently correct her master disputes it point blank. There is a hole in the skimmer somewhere. However she has returned without going into drydock.

Fred Gilbert mate of the schooner Montcalm, was drowned from that vessel Sunday evening. At the time he was engaged with others of the crew in hoisting the yawl up to the davits and accidently fell overboard, striking the edge of the boat and immediately sunk out of reach. The vessel at the time was anchored opposite Springwells. The deceased leaves a widow and one child, who reside at Ellisbury, N. Y., who were immediately notified by telegram of the sad event. Up to this writing the body has not been recovered.

As has been frequently the case the citation of three-and-afters on the lakes is almost of daily mention in the press. There are no such craft on the lakes and the term as applied better befits a land lubber that a sham mariner.

The tug Charlton, while coming up the river Saturday with three vessels in tow stranded on Fighting Island during a squall but were released a few hours afterwards by the tug International from Detroit.

The schooners Pandora and Bangalore, now three weeks at Windsor, are still without charters.

The Detroit drydock company are rebuilding the shears wharf and will have it soon completed. This is a very important branch of the companys operations as everything of a weighty character, such as boilers, spars and heavy machinery is thus speedily dispatched.

The schooner Corsican has been seized by the United States Marshall to satisfy a claim preferred by the Detroit drydock company for repairs the company made on the schooner.

Captain Grummond has purchased a wharf at Mackinac, and intends to start a coal yard there for the convenience of craft in that part of the lakes. He is also erecting a warehouse and storeroom on the wharf.

About three years ago, as the George Jerome towed the schooner Victor past Belle Isle a collision occurred between the Victor and the steambarge Macy, going the other way. The Victor sunk. The tug was libeled and adjudged in fault and ordered to be sold. However, she was not sold, but managed to get into Canadian waters and out of reach of American courts. While this judgment was still upon her she was sold twice in Canadian admiralty. Last spring she was captured in Algonac and tied up for the old case. She is running under bonds.

J. W. H.

MILWAUKEE.

The new steamship Australasia arrived Sunday night on her maiden trip, and Captain Davidson, her owner, is well pleased with her working on her first trip. She has 21,000 barrels of salt, or 3,150 tons, the largest cargo ever carried by a lake vessel

The schooner John Schuette came in light from Chicago to strip and go into winter quarters. The schooner Naiad has been placed in ordinary, as no cargo can be secured.

The Milwaukee Sentinel of a recent date says: There is now before the Milwaukee common council a resolution to purchase a tug with a powerful pump, to be used in case of fire in the vicinity of the river, but the action on it is likely to be deferred until Milwaukee has an experience similar to Cleveland.

The steambarge Monohansett and barges Massasoit and Merriam, which have been in the ore trade all season, have been stripped and will be laid up on account of the dullness in freight.

The capsized schooner Bessie Boalt was abandoned at Ahnapee by the tug Welcome, as she could not be righted.

Friday night, while off Port Washington, the schooner Skylark was run into by the schooner Surprise. The former's headgear was carried away, the damage amounting to about $200. The Surprise was running free, while the Skylark was by the wind, and consequently had the right of way.

The tug Samson, of Cleveland, with three coal-laden schooner, lost her rudder and shoe off Ahnapee.

BUFFALO.

Special to the Marine Record.

Business has been somewhat dull this week.

The propeller John C. Gault will probably have a bill damages for running into the approach of the Michigan street swing bridge over the Buffalo river and damaging it to the extent of about $100.

The damage to the propeller Potomac by the recent fire will be about $200. The trestle was being torn down, so that the damage on that will hardly be noticed.

The propeller D. W. Powers, bound down, broke her connecting-rod off Port Colborne and was towed into port by the tug J. L. Williams. Her tow of five barges were also brought in.

Appraisers estimate the loss on the barge Dan Rogers, recently waterlogged, at $1,500.

John Gobing, watchman of the steambarge Passaic, fell overboard and was drowned off Long Point Saturday morning about 1 o'clock. He was a Russian and shipped at Buffalo. He has a sister living at Buffalo.

The barges of the Passaic's tow, in running in last evening, collided, the Elma running into the Hattie, the former's stern being slightly damaged. Some of the lumber was blown off the decks of the barges.

The tug Kate Williams came here to tow up the disabled Powers' four barges.

There has already been expended on the Buffalo harbor $1,665,440.41, and it will require $1,330,000 more to complete the work according to the estimates. The right bank of the Niagara river, between Youngstown and Fort Niagara, is cutting badly, and an appropriation will be asked of the next Congress sufficient to solidify it.

Coal freights yesterday were quite dull. There was a fair demand for tonnage to Chicago and Milwaukee. A number of upper lake vessels were on the market, but very few care to go to those ports, owing to the depression there in grain freights. They prefer to go light to Duluth, where they can get a good return cargo. A large number of Detroit and Toledo vessels were in port, but coal cargoes for those places were very scarce. Most of these craft are compelled to return up light. The steamer Jim Sheriffs goes light to Detroit for a wheat cargo. The steamer Philadelphia and schooner J. M. Mead were placed for coal to Chicago at 60 cents, and the schooner St. Peter for Toledo at 20 cents.

DULUTH.

special to the Marine Record.

The Herald of the 29th September says, the David Dows loaded 75,000 bushels of No. 1 hard wheat at elevator B yesterday morning in three hours and a half. The Iron Duke, which tows the Dows, loaded 49,000 bushels of the same article at elevator A yesterday afternoon and both boats cleared to-day. The cargo of the Dows was put into her in quicker time than it was even done before and it goes to show what the elevator men of Duluth can do when they are rushed.

The United Empire is taking on a full load of flour. She brought thirty-five deck hands with her this trip and is doing her own loading. She will clear to-morrow.

The Russia when moving from the Northern Pacific to the elevator dock yesterday run onto the bar between the Ohio Central and elevator docks, and considerable difficulty was experienced in getting her off. This bar should be marked by a buoy or other accidents of a similar nature will occur.

A quantity of square timber is on the docks awaiting shipment to the line of the Canadian Pacific railway.

The Rutter, a consort of the Farwell, took on 60,000 bushels of wheat at elevator B yesterday afternoon. The Godfrey, another consort, took on 40,000 at elevator B to-day. They will clear when the Farwell receives her load at B.

WELLAND.

It is stated that the announced determination of the Chicago & Ogdensburg line to withdraw their boats from the canal trade, and the fact that other American boats of the larger class had decided to follow suit because of the delays at the aqueduct here, owing to low water at occasional times, has warned the canal authorities of the gravity of the situation, and the danger of the Canadian waterway losing the trade which has cost so many millions of the public money to obtain. It is now said that the authorities propose during periods when the water is so low as to cause inconvenience, that the gates at Port Colborne lock shall be closed and the canal fed from the Grand River feeder. This course, which was pointed out in the MARINE RECORD last week, would remove the dissatisfaction which has arisen as well as retain the trade which the present policy is driving away.

KINGSTON.

A few days ago the revenue cutter Bibb ran into Charlotte harbor and its officers boarded the schooner Annie Falconer and asked to see the captain's way bills and manifest. The captain did not then have a manifest, and as a consequence the case was reported to Washington. The vessel is liable to a fine of $500. The law on this point is about twenty years old and has not been enforced for nearly as many years. The officers of the revenue cutter say that as the Canadians are becoming particularly strict, the seizure of the Island Belle at Ganauogue being cited, they intended to enforce the law to the very letter. Mariners here deplore the unfortunate action of the collector at Ganauogue and desire a modification of matters as soon as possible. They said that no Government could have acted more leniently than that of the United States in recent years.

Arrangements are being completed to put on a new daily line of boats between Kingston and Montreal next season. The new boats, two in number, are to be of the same model as the steamer St. Lawrence, but larger, and will be built at Clayton during the winter.

The News says the barge Mary Stockton was caught in the storm on Saturday on her way to Sackett's Harbor, and being unable to make that place ran into this harbor. She dropped anchor near the Four Mile light, where she lay, but a short time before a flag of distress was hoisted. The harbor tug Wright put out to her, but on reaching the craft nothing could be done, as the crew were unable to hoist anchor, and another obstacle was the absence of the captain, who had gone ashore, and who was unable to return. The passage of the tug to and from the vessel was very rough, the little steamer going out of sight now and again. Later on the tug Thompson of the M. T. Co., went out and towed her in. She was unable this time to raise her anchor, and consequently had to leave it behind her. She left in tow of the Hastings for Sackett's Harbor and on the way up the anchor was recovered.

Business to Quebec and district is booming with the Richelieu Company at present, both in passengers and freight. The quantity of freight going down the river is so great that it cannot all be sent off on the steamer on the evening of delivery.

The rumor that the steambarge Drake, of Buffalo, was seized here for towing the Stockton from Port Dalhousie is not true. The towing was done, but the Stockton was in distress and had to get assistance.

PORT HURON.

The managers of the Star line of steamers have decided to withdraw their steamer Evening Star from the route between Toledo and Detroit, September 30th.

A schooner arrived at Owen Sound last Friday and reported the steamer Meteor disabled near Lonely Island, Georgian Bay. She was in danger of drifting on the rocks.

The steambarge Manistique came off the rocks at Black river, where she went ashore on the morning of the 24th. The tug Winslow left for this wreck this morning, but will be sent back to Detroit.

On Monday Jex Brothers, of this port, commenced to raise the remains of the tug Ontario, which was burned and sunk last November, below Sarnia. They will also raise the scow Wilcox, which is sunk near the same place.

ASHLAND.

Word has reached here of the loss of the fishing schooner Golden Rule, with Captain M. Plant and Alexander Ried. She took a load of lumber to Michigan Island Lighthouse last Sunday and started back Monday. A boat sent in search of the schooner has returned with the report that the Michigan Island lighthouse keepers saw her capsize in a squall and no trace can be got of her. Captain Plant leaves a wife and two children. The schooner was valued at $5,000 and belonged to the Lebell Fish Company.

SAFETY YACHTS.

There is no one thing that can add so much to the feelings of pleasure as to know that we are absolutely safe. Before defining in detail the principles of safety in the safety yacht, I purpose to add a few comments in continuance of my last article in your May number. The account in the Herald of June 12th, of the sinking of the Gazelle must have the effect of causing a loss of confidence in the death-traps now used as yachts, and do much to mar the feelings of pleasure while on them. They are all of one type and are not always safe even in smooth water.

The cause of the sinking of the Grace Irving, of Boston, is clothed in mystery; she had been a passenger boat and was considered a safe one, and no doubt was as safe as any of her kind; she had been purchased by one of the ex-mayors of Boston and fitted up in the best manner. It was a fine day when she went out on her first trip after being fitted up, but there was a sharp wind and waves outside at the time she sank. People on the shore could see that something was the matter with her as she was in plain sight, but before help could reach her she went down with all on board, and no one was left to tell the cause; probably she had been strained like the Gazelle, by rolling and pitching in the waves.

The death rate is greater among the pleasure seekers on the water during the summer than among any other class of the community. Indeed, there is hardly a day passes without one or more fatal accidents being reported. Many lives are lost from the rolling over of small boats and canoes; yachts often capsize or are swamped by waves, or some top-heavy steamboat rolls over and drowns its hundreds, as at London, Canada, or Worcester, Mass. These accidents are all caused from a lack of stability and properly located buoyancy. The accident to the Gazelle was the fault of construction and form, which was such as to take positions in rough water that brought great strain on the shel or "skin." The construction is such that the internal frame, as located, forms full crums for strain to act upon and opens or draws apart the butts or joints of the planking, or loosens the rivets in an iron vessel. It is from these causes that so many vessels disappear and are never heard from any more, such being the fate of the Gazelle. Had her leak been a large one she would have gone down, and probably none would have been saved; but as it was, it was bad enough. All honor to her brave crew and her captain; may they live long to be remembered, and may no bad effects follow from the discomorts of the night. These accidents are the more to be deplored, as the persons lost are from the most enterprising part of the community, young and active, seeking rest or relaxation from work or business cares.

The vessel to obviate and prevent accidents is no longer a mythto be talked about; is no longer a mooted question, but has been built. I now have one at Boston that has for three years been tested in the wildest times; when no other vessels were out, at times when these rolling, diving, straining small steam yachts could not have moved. This little vessel is the acme of comfort; no water ever comes on board of her; it is impossible for it to do so. She holds the waves in command and is their master; she never rolls, as she uses the waves as pillows to keep her steady, and causes them to form a cradle for her to lie in. She never pitches, as she cuts the waves down with her plough. The plans and principlas to build such vessels are now in manuscript, and will be forwarded to you for publication if you desire them and think they will interest your readers.

The safety model of a ship that I now have is at Boston; she was built in 1874, being now ten years old; she is still good for twenty more; she is ten tons burden. It may please your readers to learn of some of her performances while sailing with other boats and in comparison with them, as she was built simply to test principles of safety in rough weather. I took all opportunities that offered and availed myself of all gales of wind to prove them true, and also to prove the form and construction correct. It differs in all respect from all others ever used, and is the direct opposite, as she has her base of principles laid in known science, such as no others now built have.

In the fall of 1876 she had a severe test in a northeast gale, which came up in the night. We left Boston in the morning before daylight, and went outside and was the only thing moving. About daylight we ran into Hull, and came to anchor under the highlands with two anchors down. We got our breakfast, and as I had been out most of the night in her before we started down the harbor, I left the men to watch and I turned in. They called me as we were dragging anchors, and the gale had much increased. We got up our anchors and made sail, Laying at the wharf was one of the most noted schooner yachts, and as we ran up our mainsail, no reef, she started out with a close-reefed mainsail and bonnet off the jib. We were detained some time cleaning our anchors from a line of lobster pots with which they had become entangled, and the schooner, when we started, was over half a mile out. To go to Boston we had to run directly in the trough of the waves. We overtook and passed the schooner. In a few moments after we passed her she gave it up, and ran before it and went up under the lee of Rainsford and Long Island. We ran the ten miles in thirty-two minutes. The schooner was over an hour and a half in getting up. This may seem incredible, but a philosophical explanation will make it appear in its true light. First, the schooner's tonnage was at least four times greater than ours, while we were carrying at least four times as much sail as the schooner had on and up. We ran as steady as a rock; no rolling, and our sails were full all the time, while the schooner rolled so badly as to spill the wind from her sails most of the time; only being able to use them to advantage during the instant of time that she was in a level position. Again, the schooner was all of the time loaded with water, while we had not a drop. We had up the full sized sails, no reef in jib, foresail or mainsail. The schooner had "close" reefed mainsail and small jib. Again, we were as light as a cork, having no ballast, and drew but ten inches of water; the schooner, on the contrary, was heavily ballasted and deep in the water.

It can be seen at a glance the great difference of the two; the schooner was completely in the power of the waves. At the time that we passed her she had drawn out from under the lee of the land, and had just got into the rollers of the ocean, and every comber went over her, and she had become nearly helpless and could not make headway from her excessive rolling. On the contrary, we did not roll and our sails drew steadily all the time, while we had so much head motion as to relieve the sails and masts from strain and no danger of splitting the sails. In that gale she proved her perfect safety and great speed when most wanted. She has passed through many gales and always has been able to take care of herself. In one great storm, when at her moorings with several others, she was the only one left afloat; all of the others were swamped; two of the best yachts near her went over endwise and broke their masts off. In another great storm she was outside under sail, carried three of her sails, no reefs; she was the only vessel that showed any sail or could have done so. When the storm struck many vessels were in sight, all of them dropped their sails. She owes her power to carry sail to her lightness and ease of head motion, as she instantly springs away from the force of the wind; but safety and comfort are her great advantages. She comes nearer to a floating home than any other craft ever built. In fact, she has at times proved herself more safe than many buildings on the land, as she has been under sail at times when buildings have been blown down and trees uprooted.

With yachts of her form and construction safety will be the rule, and accidents can only happen from gross mismanagement and carelessness. One thing is certain; she cannot sink, she cannot upset, nor can a wave break over her. She is the acme of ocean steadiness, so much so that no seasickness has been experienced on her, as her motions are of a kind not to produce it and are easy ones; no shocks from the waves are ever felt. The only point against her is that she is not "fashionable." Throw fashion to the dogs! Think of the fate that the Gazelle, the Mohawk and the Grace Irving met with. Give to our loved ones a different form of vessel than the Norma, that has to be loaded down with lead before it can stand up; it is more dangerous at times than dynamite.

Mr. Editor, help change the fashion and teach the eye of taste that "handsome is that handsome does."—*Joseph W. Norcross, in American Aquatic Magazine.*

THE STEAM YACHT VEGA.

One of the prettiest steam yachts afloat will arrive here from Quebec to-morrow. It was built at Levis this year by Mr. T. Beaubien, and is called the Vega. Quebecers are very proud of this beautiful yacht, and we learn that they have made a number of trips during the summer to Murray Bay and elsewhere with pleasure parties on board. The proprietor is on board the yacht, and left Quebec with her last Saturday afternoon with a party of friends on a trip to the Thousand Islands. It may interest some of our readers to have a description of this pretty craft. Her dimensions are 115 feet over all and she has 18 feet beam, drawing about 7 feet of water. Her frame is of bent oak, and she is planked outside with American oak. She has a compound engine, high pressure of 11 inches and low pressure of 22, with 18 inch stroke, and boiler of 100 pounds pressure. She has surface condenser for salt water, and her engine is of first-class substantial workmanship. She runs at the rate of twelve to thirteen miles an hour, and the expense of her fuel is exceedingly light. The Vega is admirably finished and fitted up, and has a certificate to carry 200 passengers. Such is the craft which is now on a visit to the Islands, and which will well repay a visit. She is to remain here but a couple of days, and during her stay the obliging proprietor will be delighted to throw her open to visitors. Being himself the builder of the Vega, Mr Beaubien has expressed himself as quite prepared to leave her behind him, provided he can find here a suitable purchaser.—*Kingston News.*

The steambarge C. F. Curtis passed Detroit Friday forenoon, having made the run between Buffalo and Detroit in twenty-two hours, with two barges in tow.

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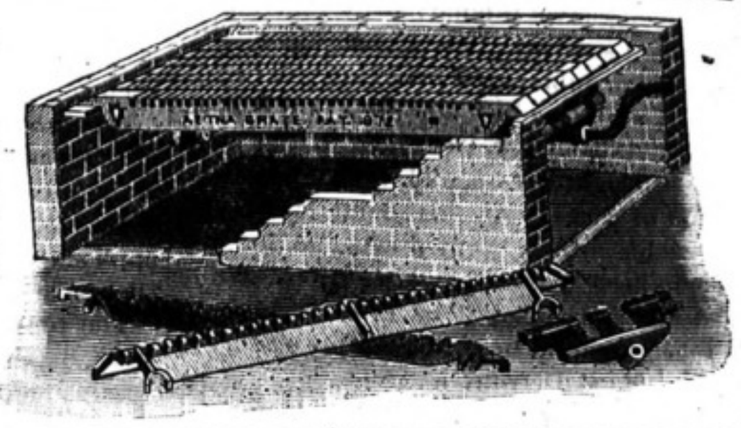

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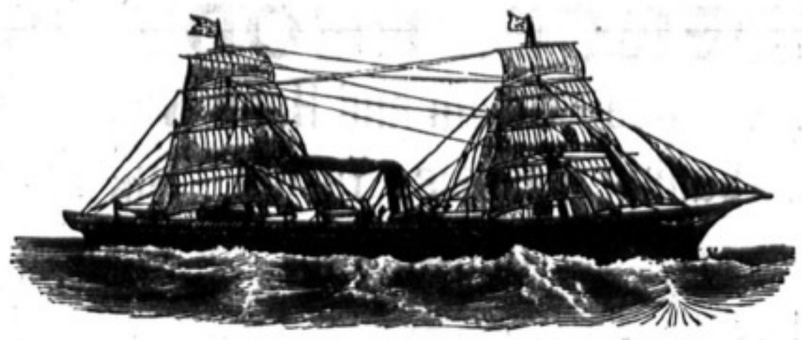

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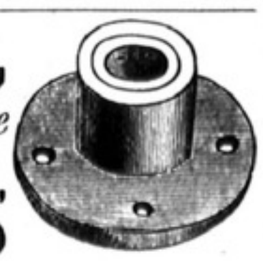

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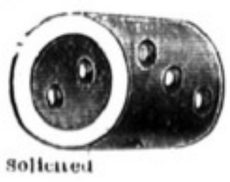

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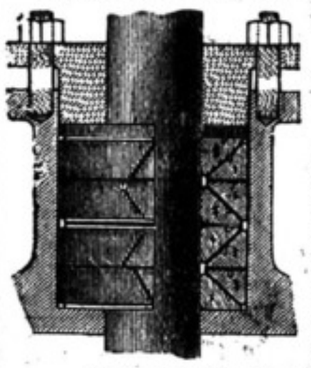

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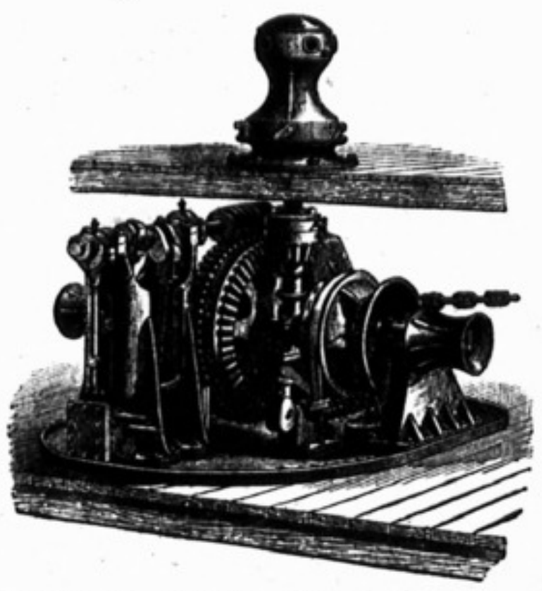
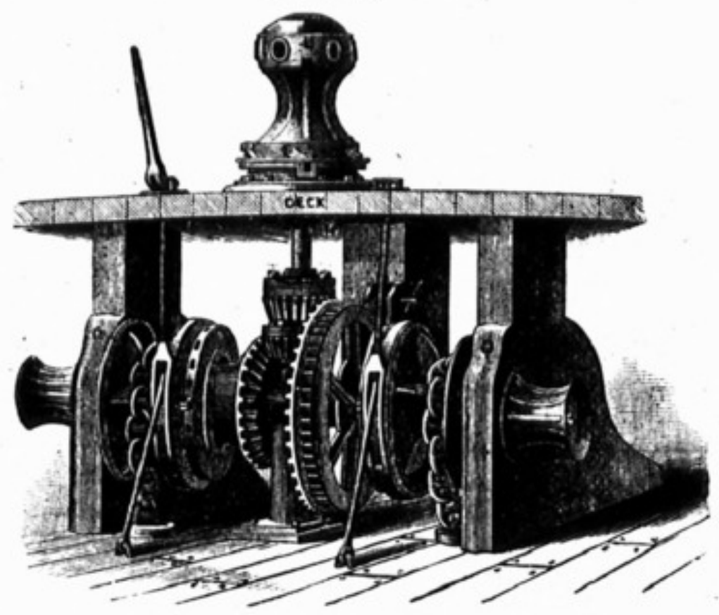


The Providence Patent Steam Capstan Windlass; New Style.



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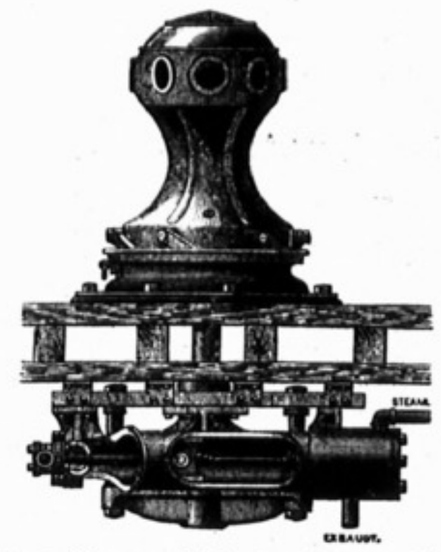

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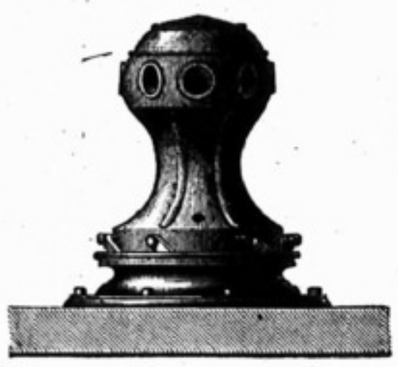

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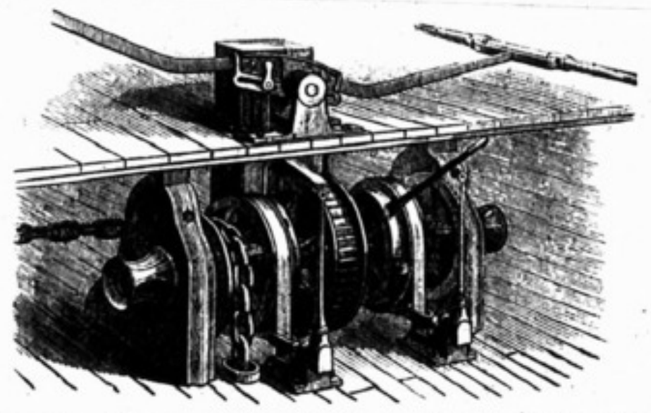

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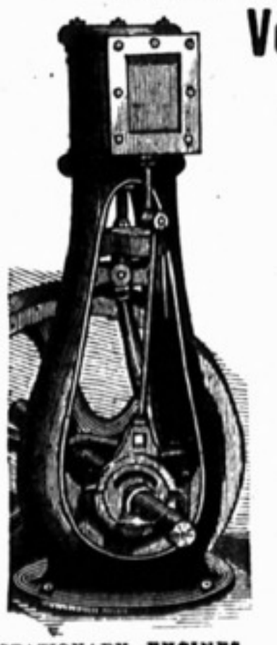

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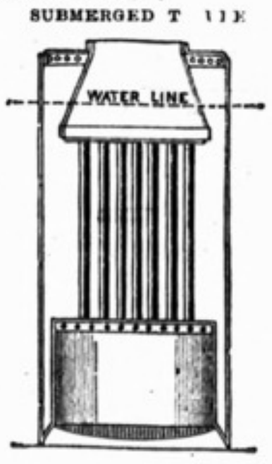

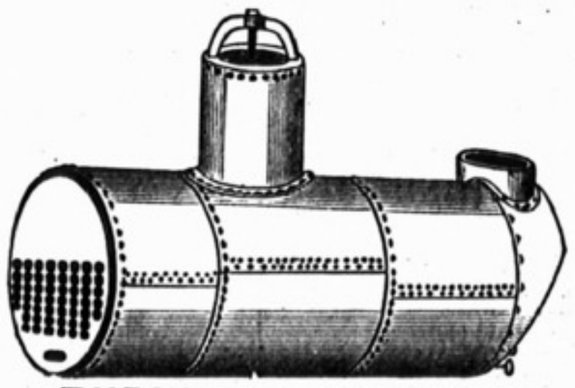

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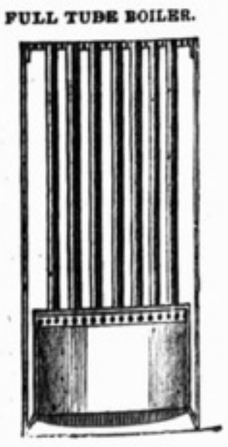

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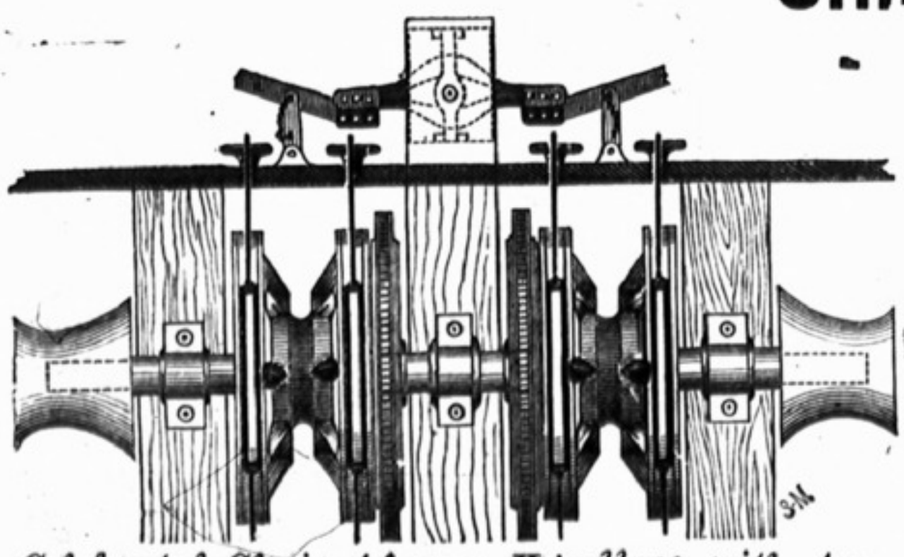

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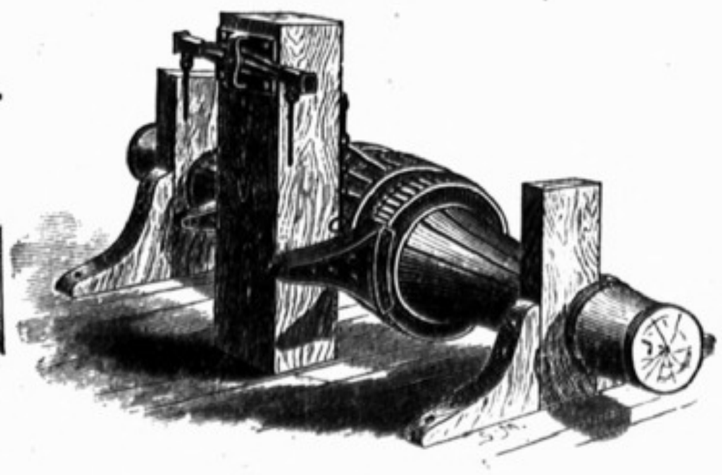
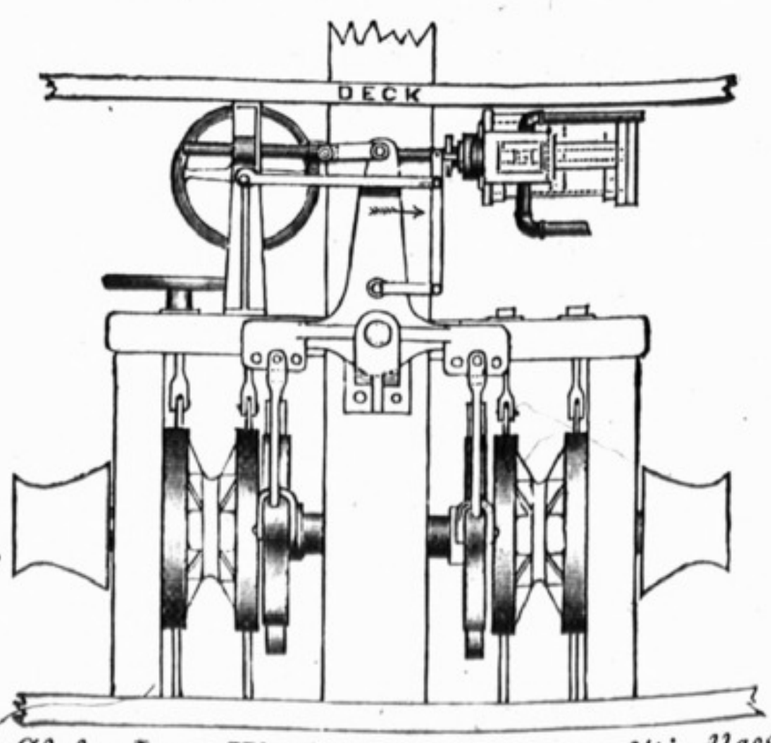


The Common Patent Windlass.



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